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L.Bermudez@pcandf.com
Direct: 925-884-0860
Fax: 925-905-2746

December 20, 2010

Ms. Barbara Jakub
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Work Plan – Additional Site Investigation

**Site: 76 Station No. 5191/5043
449 Hegenberger Road
Oakland, California
Fuel Leak Case No. RO0000219**

Dear Ms. Jakub;

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call:

Liz Bermudez
Pacific Convenience & Fuel
2603 Camino Ramon, Suite 350
San Ramon, California 94583
Tel: (925) 884-0860
Fax: (925) 867-4687
lbermudez@pcandf.com

Sincerely,

PACIFIC CONVENIENCE & FUEL

LIZ BERMUDEZ
Senior Paralegal

Attachment

December 20, 2010

Ms. Barbara Jakub
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

**RE: Work Plan – Additional Site Investigation
76 Station No. 5191/5043
449 Hegenberger Road
Oakland, California
Fuel Leak Case No. R0000219**

Dear Ms. Jakub:

Delta Consultants (Delta), has prepared this work plan for the purpose of additional assessment to determine the horizontal extent of the hydrocarbon impact in soil and groundwater. Delta is proposing the installation of four monitoring wells to assess the horizontal extent of the petroleum hydrocarbon impact to the soil and groundwater at the site, located at 449 Hegenberger Road in Oakland, California. In addition, one soil boring will be advanced adjacent to monitoring well MW-12A. Delta also proposes the redevelopment of monitoring well MW-6. The site location is shown on **Figure 1**.

Recent groundwater monitoring and sampling events conducted at the site indicate that the horizontal extent of the petroleum hydrocarbon impact to the groundwater has not been fully assessed in several areas across the site. Therefore, Delta is proposing the installation of monitoring well MW-14 west of monitoring well MW-6, monitoring well MW-15 between the station building and the southwest dispenser island, monitoring well MW-16 between the former monitoring well MW-1 and boring B3, and monitoring well MW-17 southeast of monitoring well MW-12 in the sidewalk of Hegenberger Road. Delta also proposes the advancement of one soil boring B-6 next to monitoring well MW-12A to confirm soil analytical results from that boring at 26 feet below ground surface (bgs). In addition, Delta will attempt to redevelop monitoring well MW-6. During recent batch extraction activities, conducted at the site using this monitoring well, this well was purged dry and did not recover. Proposed monitoring well and boring locations are shown on **Figure 2**.



SITE DESCRIPTION

The site is an active 76 station located on the southwest corner of Hegenberger Road and Edgewater Drive in Oakland, California. The site contains four fuel dispensers on two islands under a single canopy, three fuel underground storage tanks (USTs) on the north side of the site, a carwash facility on the west side of the site, and a station building in the central portion of the site. The current site features are shown on **Figure 2**.

PREVIOUS ASSESSMENT

October 1991 - Four soil samples were collected from the product pipe trenches at depths of approximately 3 feet bgs during a dispenser island modification. The product pipe trenches were subsequently excavated to the groundwater depth at 4 to 4.5 feet bgs. Historical soil analytical results are presented in **Table 1**. Sample locations are shown on **Figure 3**.

February 1992 - Three monitoring wells, MW-1 through MW-3, were installed at the site to depths ranging from 13.5 to 15 feet bgs. Historical soil analytical results are presented in **Table 1**. Monitoring well locations are shown on **Figure 3**.

August 1992 - Three additional monitoring wells, MW-4 through MW-6, were installed at the site to a depth of 13.5 feet bgs. Historical soil analytical results are presented in **Table 1**. Monitoring well locations are shown on **Figure 3**.

September 1994 - One 280-gallon waste-oil UST was removed from the site. The UST was made of steel, and no apparent holes or cracks were observed in the UST. One soil sample was collected from beneath the former UST at a depth of approximately 9 feet bgs. No petroleum hydrocarbons were reported. Historical soil analytical results are presented in **Table 1**. The location of the former waste-oil UST is shown on **Figure 3**.

January 1995 - Two additional monitoring wells, MW-9 and MW-10, were installed to depths of 13 and 15 feet bgs. In addition, monitoring well MW-3, which was damaged during the UST cavity over excavation in 1995, was fully drilled out and reconstructed in the same borehole. Historical soil analytical results are presented in **Table 1**. Monitoring well locations are shown on **Figure 3**.

March 1995 - Two 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST were removed from the site. Groundwater was encountered in the tank cavity at a depth of approximately 8.5 feet bgs. Soil samples contained total petroleum hydrocarbons as diesel (TPHd) and benzene, and TPH as gasoline (TPHg). Approximately 125,000 gallons of groundwater were pumped from the site for remediation and properly disposed off-site. Four fuel dispenser islands and associated product piping were also removed. Based on the results of the confirmation samples, the product dispenser islands were over excavated to approximately 6 feet bgs. Historical soil analytical results are presented in **Table 1**. Sample locations are shown on **Figure 3**.

March-April 1995 - During demolition activities of the former station building, soil samples were collected from two excavations, which were subsequently over excavated. Confirmation samples contained petroleum hydrocarbons. An additional

area on the south side of the former station building was excavated based on photo-ionization detector (PID) readings. Two monitoring wells, MW-1 and MW-2, were destroyed in order to allow for over excavation activities to extend to an area adjacent to the dispenser islands in the southeastern quadrant of the site. The excavated areas were subsequently backfilled with clean-engineered fill. Historical soil analytical results are presented in **Table 1**. Sample locations are shown on **Figure 3**.

April 1997 - Two additional monitoring wells, MW-7 and MW-8, were installed off-site to the south and east on the neighboring property to a depth of 13 feet bgs. In addition, two existing monitoring wells were destroyed in order to accommodate the construction of a car wash at the site. Monitoring wells MW-4 and MW-5 were fully drilled out and backfilled with neat cement. Historical soil analytical results are presented in **Table 1**. Monitoring well locations are shown on **Figure 3**.

October 2003 - Site environmental consulting responsibilities were transferred to TRC.

April 8-9, 2005 - TRC conducted a 24-hour dual phase extraction (DPE) test at the site using monitoring well MW-6. The 24-hour DPE test was only moderately successful at removing vapor-phase petroleum hydrocarbons from the subsurface; therefore, TRC recommended DPE no longer be considered a viable remedial alternative for the site.

October 2007 - Site environmental consulting responsibilities were transferred to Delta Consultants.

December 2009 - Delta advanced two borings, B-4 and B-5, to depths of 20 feet bgs and 32 feet bgs, respectively. Analytical results from the soil and groundwater samples collected from these two borings indicated that the soil and the groundwater were impacted by petroleum hydrocarbons at these locations. Historical soil analytical results are presented in **Table 1**. Groundwater analytical results are presented in **Table 2**. Boring locations are shown on **Figure 3**.

June 2010 - Delta installed four monitoring wells, MW-11, MW-12, MW-12A, and MW-13, to depths of 20 feet bgs, 20 feet bgs, 34 feet bgs, and 15 feet bgs, respectively. Analytical results from the soil and groundwater samples collected indicated that the soil and groundwater is impacted by petroleum hydrocarbons predominately in the vicinity of boring MW-12. Historical soil analytical results are presented in **Table 1**. Groundwater analytical results are presented in **Table 2**. Monitoring well locations are shown on **Figure 3**.

SENSITIVE RECEPTORS

April 24, 2006 TRC completed a sensitive receptor survey for the site. According to the Department of Water Resources (DWR) records, there are two irrigation wells and one industrial well located within one-half mile of the site. The nearest well, is an irrigation well, located approximately 1,080 feet southeast of the site. The other irrigation well is located approximately 2,623 feet southeast of the site and the industrial well is located approximately 2,570 feet northeast of the site.

In addition, two surface water bodies were observed within a one-half mile radius of the site. San Leandro Creek is located approximately 1,400 feet southwest of the site and flows into the San Leandro Bay. Elmhurst Creek is located approximately 2,220 feet north of the site and also flows into the San Leandro Bay.

SITE GEOLOGY AND HYDROGEOLOGY

The site is underlain by Holocene-age bay mud. The bay mud typically consists of unconsolidated, saturated clay and sandy clay that is rich in organic material. The bay mud locally contains lenses and stringers of well-sorted silt, sand, gravel, and beds of peat.

The most recent monitoring and sampling event was conducted at the site on September 20, 2010. The measured depth to groundwater ranged from 2.80 feet to 4.85 feet below top of casing (TOC). The groundwater flow direction was east-southeast with a hydraulic gradient of 0.007 foot per foot.

PROPOSED ACTIVITIES

Permitting, Utility Notification and Borehole Clearance

Before commencing field activities Delta will update the site specific Health and Safety Plan (HASP) in accordance with state and federal requirements for use during the investigation activities. Drilling permits will be obtained for the monitoring wells from the Alameda County Public Works Agency (ACPWA). In addition, Delta will attempt to obtain an encroachment permit from the City of Oakland for the monitoring well proposed to be installed in the sidewalk of Hegenberger Road. If an encroachment permit cannot be obtained from the City of Oakland or if utilities are present which make this location not practical, Delta will move the location of monitoring well MW-17 into the planter on-site. Prior to drilling, Underground Service Alert (USA) will be notified as required by law and a private utility locator will be employed to clear the proposed boring locations for underground utilities. The City of Oakland will be contacted to obtain construction details for the storm sewer on the eastern edge of the property. In addition, an air- or water-knife will be used to clear each boring location to a minimum depth of 5 feet bgs prior to drilling.

Soil Boring Advancement

Delta proposes to advance one (1) soil boring (B-6) in the vicinity of monitoring well MW-12A, to confirm the elevated petroleum hydrocarbon concentrations reported in soil sample MW-12A@26 collected during the June 2010 investigation, using direct push technology. The boring will be advanced to a depth of approximately 26 feet bgs.

Soil samples will be collected continuously for lithological interpretation and field screening. The soil samples will be logged using the Unified Soil Classification System (USCS) for lithologic interpretation and field screened for the presence of volatile organic compounds by headspace analysis using a pre-calibrated PID. First water is anticipated to be at a depth of approximately 2 to 4 feet bgs. At a minimum, soil samples with the highest PID readings, changes in lithology, and the bottom of the borehole will be submitted for analysis. Samples will be placed on ice pending transportation to the laboratory. A chain-of-custody will accompany the samples during transportation to the laboratory. The collected soil samples will be analyzed by Pace Analytical Services, Inc. (Pace) for TPHd by Environmental Protection Agency (EPA) Method 8015 (silica gel treated), TPHg by the California LUFT Method, benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary amyl-methyl ether

(TAME), tertiary-butyl alcohol (TBA), 1,2-dichloroethane (1,2-DCA), ethylene dibromide (EDB), and ethanol by EPA Method 8260, and total lead by EPA Method 6010.

Subsequent to sample collection, the boring will be backfilled to the surface with neat cement using a tremie pipe.

Monitoring Well Installation

The borings for the proposed monitoring wells MW-14, MW-15, MW-16, and MW-17 will be advanced west of monitoring well MW-6, between the station building and the southwest dispenser island, between former monitoring well MW-1 and boring B3, and southeast of monitoring well MW-12 in the sidewalk of Hegenberger Road, respectively. The borings will be advanced to a depth of approximately 13 feet bgs using direct push technology. The proposed monitoring well locations are shown on **Figure 2**. Soil samples collected from the borings will be logged using the USCS for lithologic interpretation and field screened for the presence of VOCs by headspace analysis using a pre-calibrated PID. Soil samples will be collected continuously for lithologic interpretation and field screening beginning at a depth of 5 feet bgs. Soil samples exhibiting the highest PID readings, changes in lithology, visible staining, and the soil sample collected from the bottom of each boring will be submitted for laboratory analysis. A chain-of-custody will accompany the samples during transportation to the laboratory. The collected soil samples will be analyzed for TPHd (silica gel treated) by EPA Method 8015, TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, 1,2-DCA, EDB, and ethanol by EPA Method 8260, and total lead by EPA Method 6010.

The monitoring well casing will be installed in the well borings while the direct push rods are in place. The monitoring wells will consist of pre-packed well screens with a 2-inch inside diameter schedule 40 poly-vinyl chloride (PVC) well casing with a sand pack consisting of RMC Lonestar Sand #3 or equivalent (factory packed) around the screened interval. The screen interval will be determined in the field, based on the encountered lithology. The screen interval in each monitoring well is anticipated to be 10 feet in length from 3 to 13 feet bgs. The perforation size in the screen interval will be 0.020-inch. The sand pack will extend approximately one half-foot above the top of the screen interval.

A one half foot-thick bentonite seal will be placed on top of the sand pack. The remainder of the annular space will be filled with neat cement and the monitoring wells will be fitted with a locking cap and encased in a traffic-rated protective vault placed at existing ground level. Well construction details are shown on **Figure 3**.

Well Development, Monitoring, and Sampling

The monitoring wells will be developed a minimum of 72 hours after construction. The monitoring wells will be developed using a surge block followed by bailing and purging using a submersible pump. A minimum of 10 casing volumes of groundwater will be removed from the monitoring wells during the development process.

The monitoring wells will be sampled a minimum of 48 hours after they have been developed, and will be incorporated into a quarterly sampling schedule.

Groundwater samples collected for analysis from the four newly installed monitoring wells will be analyzed by Pace for TPHd (silica gel treated) by EPA Method 8015, TPHg, BTEX, MTBE, DIPE, ETBE, TAME, TBA, 1,2-DCA, EDB, and ethanol by EPA Method 8260.

Wellhead Survey

Following the completion of the newly installed monitoring wells, a California licensed surveyor will survey the northing and easting of the wells using Datum NGVD29 or NAD 83. The monitoring well elevations will be surveyed relative to mean sea level, with an accuracy of +/- 0.01 foot. A global positioning system (GPS) will also be used to survey in the latitude and longitude of the well to be uploaded into California's Geo Tracker database system. The survey of the monitoring well locations will be to sub-meter accuracy.

Disposal of Drill Cuttings and Wastewater

Drill cuttings, well development water, and decontamination water generated during well installation activities will be placed into properly labeled 55-gallon Department of Transportation (DOT) approved steel drums and temporarily stored on the station property. Samples of the drill cuttings, well development water, and decontamination wastewater will be collected, properly labeled, and placed on ice for submittal to Pace. The waste samples will be analyzed for TPHg, BTEX, and MTBE by EPA Method 8260 and total lead by EPA Method 6010. A chain-of-custody will accompany the samples during transportation to the laboratory. Subsequent to receiving the laboratory analytical results, the drummed drill cuttings, well development water, and decontamination wastewater will be profiled, transported, and disposed of at an approved facility.

Monitoring Well MW-6, Redevelopment

During recent batch extraction activities conducted at the site using monitoring well MW-6, this monitoring well was purged dry and did not recover. Therefore, in an attempt to increase the efficiency of this monitoring well during batch extraction activities, Delta proposes that this monitoring well be redeveloped. The monitoring well will be developed using a surge block followed by bailing and purging using a submersible pump. If redevelopment does not produce a measurable increase in well production during batch extraction activities, Delta will likely propose that this monitoring well be replaced with a 4-inch diameter monitoring/extraction well.

Reporting

Following completion of the field work and receipt of analytical results, a site investigation report will be prepared and submitted within 60 days. The report will present the details of the site investigation activities, including copies of the drilling permits, details of disposal activities and copies of disposal documents (if available), and groundwater analyses and gradient determination, including copies of laboratory reports. Required electronic submittals will be uploaded to the State Geotracker database.

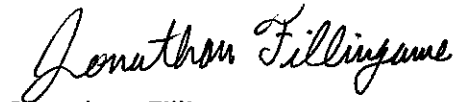
Remarks/Signatures

The recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report will be performed. This report is intended only for the use of Delta's client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

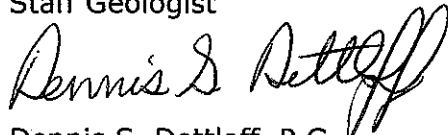
If you have any questions regarding this project, please contact us at (800) 477-7411.

Sincerely,

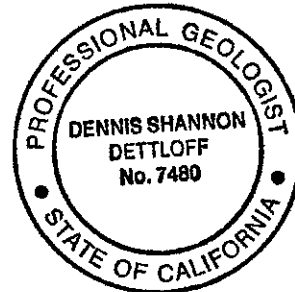
DELTA CONSULTANTS



Jonathan Fillingame
Staff Geologist



Dennis S. Dettloff, P.G.
Senior Project Manger
California Registered Professional Geologist No. 7480



Figures

- Figure 1 - Site Location Map
- Figure 2 - Site Map with Proposed Well Locations
- Figure 3 - Site Map with Historic Sample Locations
- Figure 4 - Proposed Groundwater Monitoring Well Construction Detail

Tables

- Table 1 - Historical Soil Analytical Results
- Table 2 - Current Groundwater Gauging and Analytical Results (September 2010)

Figures

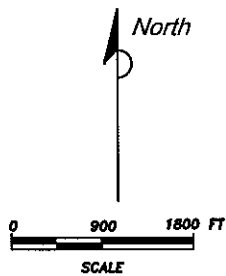
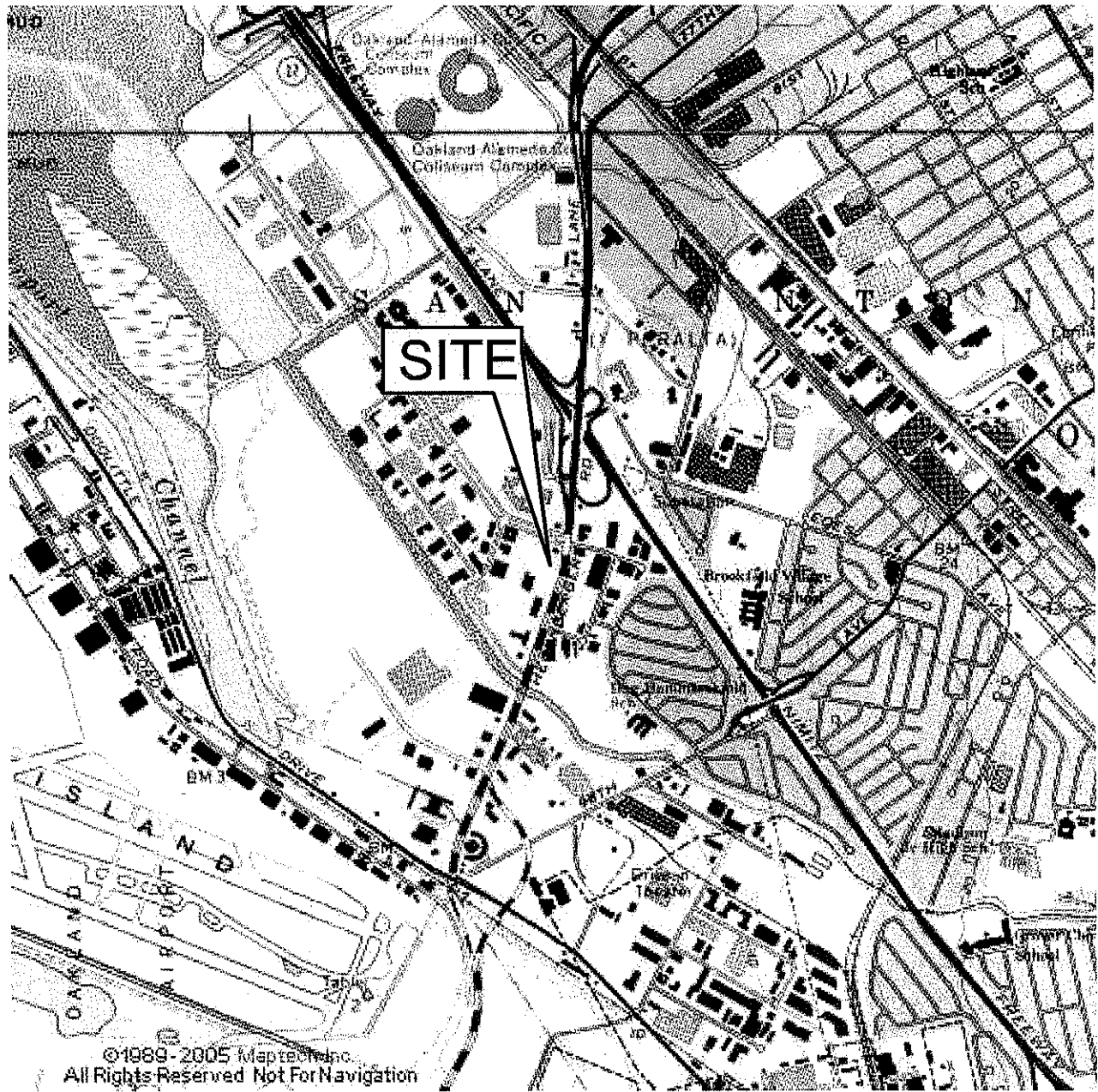


FIGURE 1

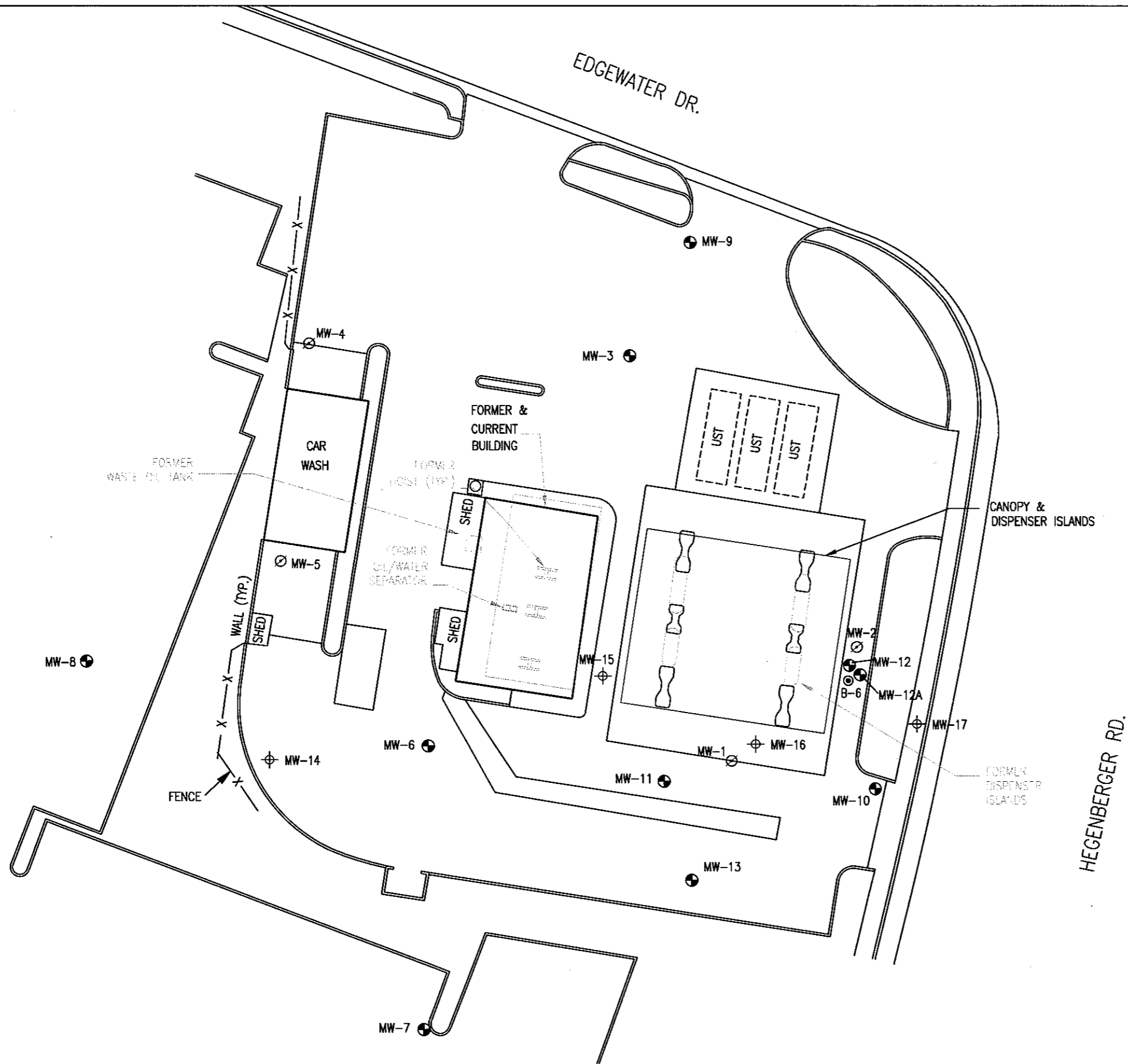
SITE LOCATION MAP

76 SERVICE STATION #5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142611270	DRAWN BY JH 08/02/09
FILE NO. 11270-SiteLocator	PREPARED BY DD
REVISION NO.	REVIEWED BY



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE (1973)



LEGEND

- MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL
- ⊕ MW- PROPOSED MONITORING WELL
- ⊙ B-6 PROPOSED SOIL BORING

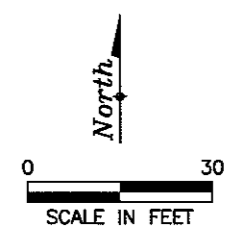


FIGURE 2
SITE MAP WITH PROPOSED LOCATIONS

76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY JF	DRAWN BY JH	
DATE 12/14/10	REVIEWED BY DD	FILE NAME 5191-SiteS	

LEGEND

- ⊕ MW- MONITORING WELL
- ⊙ MW- ABANDONED MONITORING WELL
- ⊙ B-4 BORING LOCATION
- SOIL SAMPLE LOCATION

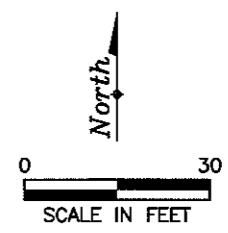
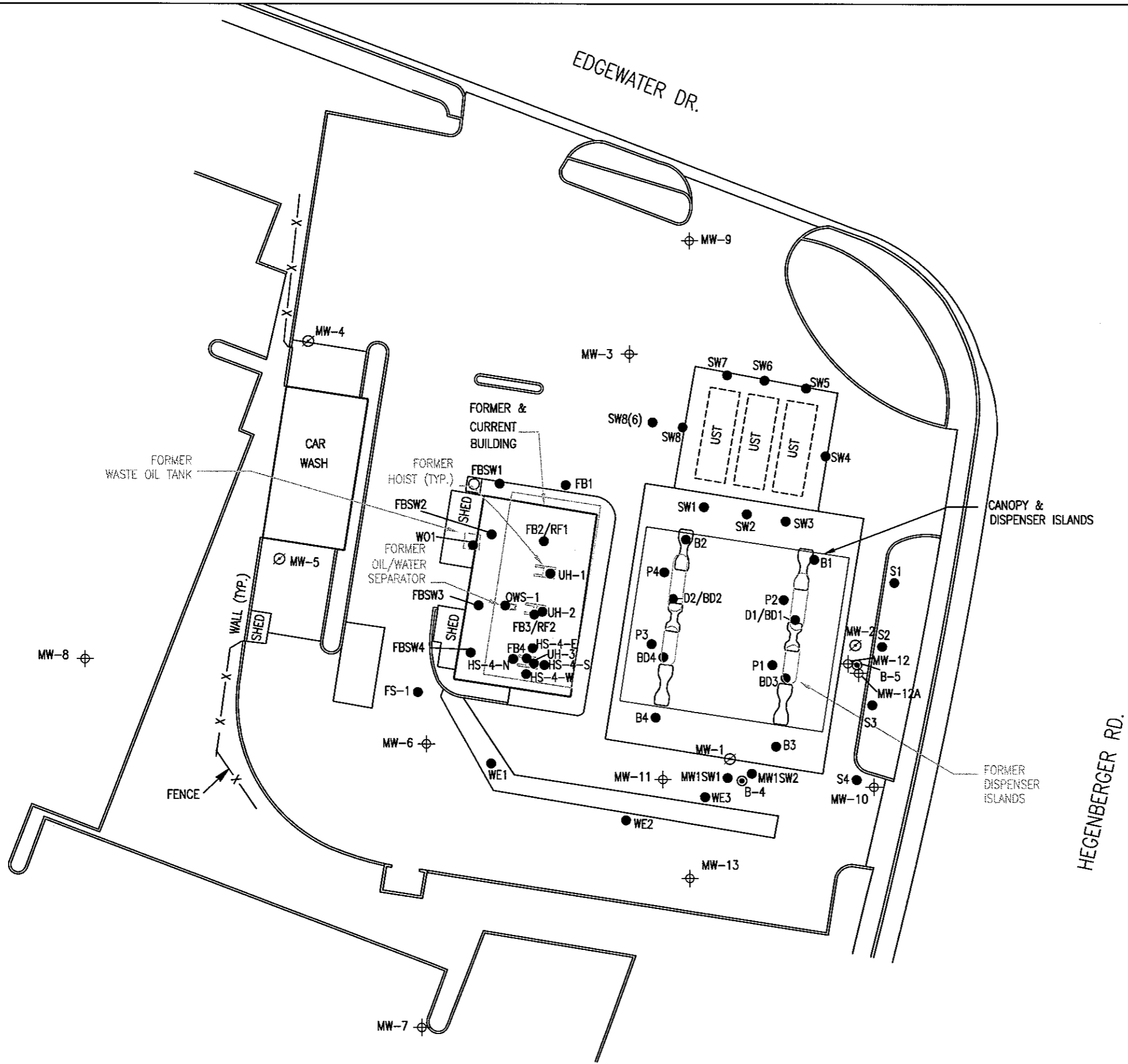


FIGURE 3
SITE MAP WITH HISTORICAL SAMPLE LOCATIONS
 76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO. 142705191	PREPARED BY TP	DRAWN BY JH	
DATE 12/10/10	REVIEWED BY DD	FILE NAME 5191-SiteS	

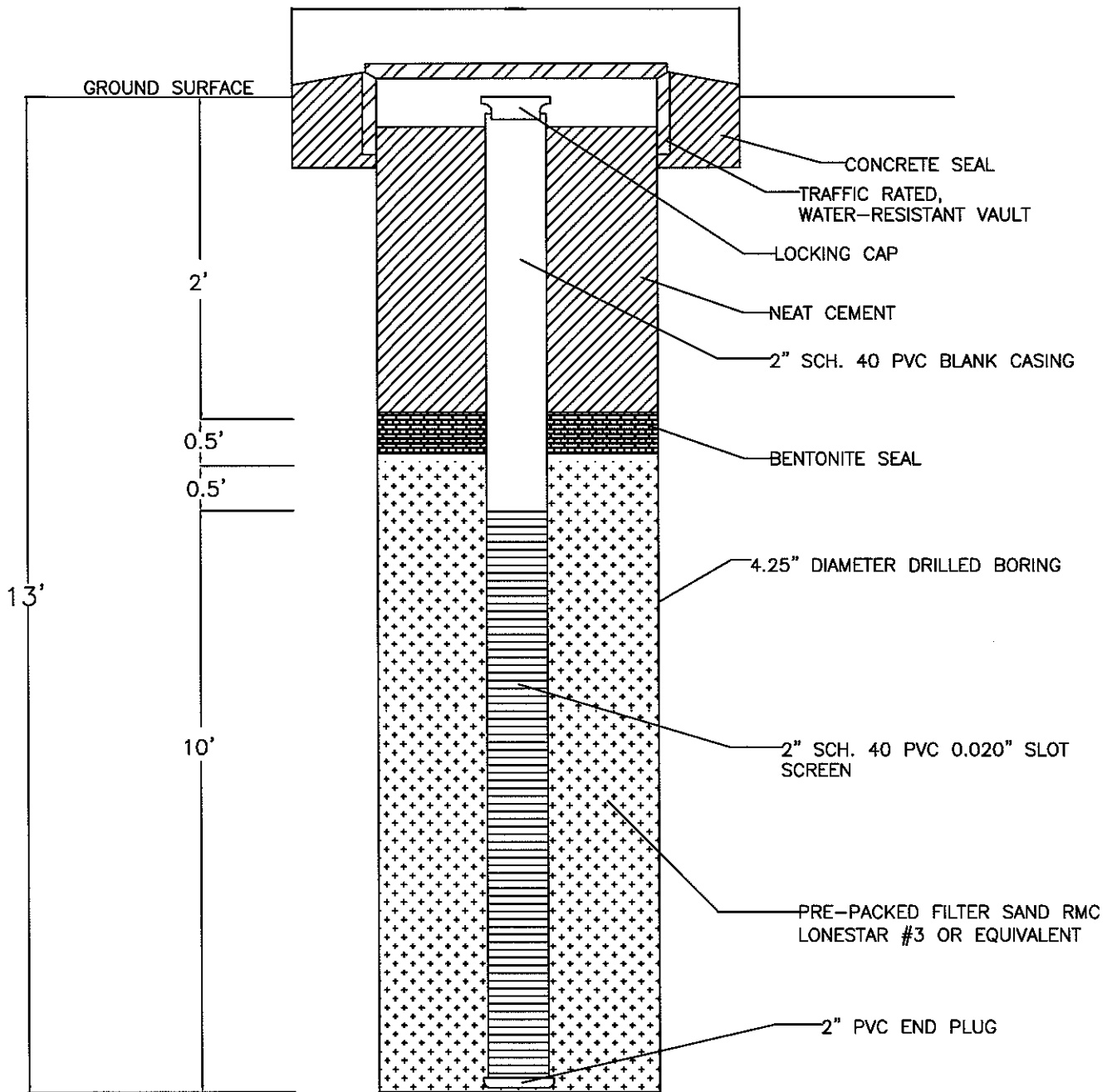


FIGURE 4
 PROPOSED GROUNDWATER MONITORING
 WELL CONSTRUCTION DETAIL

76 STATION NO. 5191/5043
 449 HEGENBERGER ROAD
 OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
142705191	JF	DR/JH
DATE	REVIEWED BY	FILE NAME
12/10/10	DD	5191-WellDetail



Tables

TABLE 1
HISTORICAL SOIL ANALYTICAL RESULTS
 76 Station No. 5191/5043
 449 Hegenberger Road, Oakland, California

Sample ID	Date	Sample Depth (feet)	TPHg (mg/kg)	TPHg* (mg/kg)	TPHd (mg/kg)	TPHd* (mg/Kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)	Lead (mg/kg)
P1	10/25/1991	3	3,200	NA	420	NA	33	120	110	540	NA	NA	NA	NA
P2	10/25/1991	3	9,000	NA	8,400	NA	46	120	330	1,500	NA	NA	NA	NA
P3	10/25/1991	3	7,100	NA	1,100	NA	48	410	220	1,200	NA	NA	NA	NA
P4	10/25/1991	3	370	NA	460	NA	7.4	39	12	77	NA	NA	NA	NA
MW1(2.5)	2/5/1992	2.5	14,000	NA	1,200	NA	160	680	470	2,400	NA	NA	NA	NA
MW2(3.5)	2/5/1992	3.5	9,000	NA	2,400	NA	74	440	280	1,400	NA	NA	NA	NA
MW2(4.5)	2/5/1992	4.5	31	NA	29	NA	2.4	0.14	3	9	NA	NA	NA	NA
MW3(3)	2/5/1992	3	<1.0	NA	49	NA	<0.005	<0.005	<0.005	0.011	NA	NA	NA	NA
MW3(4.5)	2/5/1992	4.5	<1.0	NA	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW4(5)	8/21/1992	5	<1.0	NA	<1.0	NA	<0.005	<0.005	<0.005	0.0066	NA	NA	NA	NA
MW5(6)	8/21/1992	6	340	NA	43	NA	1.1	1.2	7.8	13	NA	NA	NA	NA
MW6(5)	8/21/1992	5	3.7	NA	1.2	NA	0.9	<0.005	1	0.05	NA	NA	NA	NA
WC1	9/20/1994	9	<1.0	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	5.0
MW8(3)	1/25/1995	3	1.7	NA	2.6	NA	0.016	<0.005	<0.005	<0.005	NA	NA	NA	NA
MW10(2.5)	1/25/1995	2.5	44	NA	17	NA	2	1.5	2.3	5.4	NA	NA	NA	NA
SV1	3/10/1995	8	11	NA	NA	NA	2.8	<0.005	1.6	0.067	NA	NA	NA	NA
SV2	3/10/1995	8	11	NA	NA	NA	3.8	<0.005	0.79	0.034	NA	NA	NA	NA
SV2(4)	3/10/1995	4	2,000	NA	140	NA	<0.005	53	42	240	NA	NA	NA	NA
SV3	3/10/1995	8	1	NA	<1.0	NA	0.009	0.006	0.007	0.014	NA	NA	NA	NA
SV4	3/10/1995	8	<1.0	NA	1.8	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
SV5	3/10/1995	8	<1.0	NA	1.4	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
SV6	3/10/1995	8	<1.0	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
SV7	3/10/1995	8	<1.0	NA	NA	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA
SV8	3/10/1995	8	140	NA	NA	NA	2.6	5.3	2.7	12	NA	NA	NA	NA
D1	3/24/1995	3	760	NA	46	NA	1.5	19	15	73	NA	NA	NA	NA
D2	3/24/1995	3	1,200	NA	97	NA	1.6	16	22	110	NA	NA	NA	NA
B1	3/28/1995	6	<1.0	NA	<1.0	NA	0.13	0.026	0.0088	0.059	NA	NA	NA	NA
B2	3/28/1995	6	3.4	NA	<1.0	NA	2.8	0.041	0.19	0.28	NA	NA	NA	NA
B3	3/28/1995	6	<1.0	NA	<1.0	NA	<0.005	0.01	<0.005	0.017	NA	NA	NA	NA
B4	3/28/1995	6	<1.0	NA	<1.0	NA	<0.005	0.017	<0.005	0.032	NA	NA	NA	NA
BD1	3/28/1995	6	<1.0	NA	<1.0	NA	0.21	0.011	0.018	0.038	NA	NA	NA	NA
BD2	3/28/1995	6	12	NA	4.8	NA	2.6	0.68	0.56	1.7	NA	NA	NA	NA
BD3	3/28/1995	6	<1.0	NA	<1.0	NA	0.012	0.014	0.012	0.043	NA	NA	NA	NA
BD4	3/28/1995	6	<1.0	NA	<1.0	NA	<0.005	0.011	0.0072	0.037	NA	NA	NA	NA
S1	3/28/1995	4	110	NA	<1.0	NA	3.5	0.61	7	13	NA	NA	NA	NA
S2	3/28/1995	4	1.4	NA	9.4	NA	0.028	0.012	0.015	0.019	NA	NA	NA	NA
S3	3/28/1995	4	22	NA	2.9	NA	1.2	1.2	0.65	1.9	NA	NA	NA	NA
S4	3/28/1995	4	150	NA	5.8	NA	6.8	5.6	5.3	27	NA	NA	NA	NA
RF1	3/31/1995	3	2,000	NA	330	NA	8.8	68	55	280	NA	NA	NA	NA
RF2	3/31/1995	3	3,300	NA	230	NA	18	160	110	550	NA	NA	NA	NA
SW8(6)	4/3/1995	8	<1.0	NA	<1.0	NA	0.0085	<0.005	0.0084	0.011	NA	NA	NA	NA
FB1	4/3/1995	4.5	25	NA	8.6	NA	2.1	0.058	2.2	1.3	NA	NA	NA	NA
FB2	4/3/1995	4.5	7.1	NA	1.6	NA	0.4	0.018	0.81	1.7	NA	NA	NA	NA
FB3	4/3/1995	4.5	1.6	NA	<1.0	NA	0.028	<0.005	0.13	0.26	NA	NA	NA	NA
FB4	4/3/1995	4.5	1.4	NA	<1.0	NA	0.23	0.022	0.05	0.15	NA	NA	NA	NA
FBSW1	4/3/1995	3	7.4	NA	1.3	NA	0.066	0.021	1	<0.005	NA	NA	NA	NA
FBSW2	4/3/1995	3	70	NA	7.6	NA	0.11	0.096	2.1	6.7	NA	NA	NA	NA
FBSW3	4/3/1995	3	2.3	NA	7.8	NA	0.012	0.01	0.018	0.012	NA	NA	NA	NA
FBSW4	4/3/1995	3	9	NA	3.7	NA	0.25	0.036	0.93	0.062	NA	NA	NA	NA
MW1SW1	4/5/1995	5	25	NA	2.8	NA	2.1	0.025	2.4	0.19	NA	NA	NA	NA
MW1SW2	4/5/1995	5	4.2	NA	1.2	NA	0.17	0.01	0.68	0.048	NA	NA	NA	NA
WE1	4/5/1995	4.5	26	NA	3.4	NA	0.31	0.3	0.59	2.6	NA	NA	NA	NA
WE2	4/5/1995	4.5	2.7	NA	5.1	NA	0.0054	0.0065	0.038	0.17	NA	NA	NA	NA
WE3	4/5/1995	4.5	8.2	NA	1.6	NA	0.21	0.074	1.6	0.0076	NA	NA	NA	NA
FS-1	4/5/1995	4	12	NA	<1.0	NA	0.28	<0.005	1.5	0.016	NA	NA	NA	NA
MW8(6)	4/21/1997	6	1.3	NA	<1.0	NA	0.0051	<0.005	0.015	0.041	<0.005	NA	NA	NA

TABLE 1
HISTORICAL SOIL ANALYTICAL RESULTS
76 Station No. 5191/5043
449 Hegenberger Raod, Oakland, California

Sample ID	Date	Sample Depth (feet)	TPHg (mg/kg)	TPHg* (mg/kg)	TPHd (mg/kg)	TPHd* (mg/Kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)	Lead (mg/kg)
Delta 2009														
B-4@6	12/17/2009	6	20.4	NA	11.4	10.1	0.046	0.18	1	4.2	0.061	0.091	<0.0029	NA
B-4@15	12/17/2009	15	<4.9	NA	<5.8	<5.8	0.0036	0.0069	0.011	0.049	0.0081	0.036	<0.003	NA
B-4@20	12/17/2009	20	<4.9	NA	<5.6	<5.6	<0.003	<0.003	<0.003	<0.006	<0.003	<0.015	<0.003	NA
B-5@8	12/17/2009	8	1,060	NA	285	269	6.2	21.6	30.9	143	<0.0029	0.079	0.068	NA
B-5@17.5	12/17/2009	17.5	136	NA	27.8	26.9	0.55	1.4	2.7	15.8	<0.003	0.035	<0.003	NA
B-5@26.5	12/17/2009	26.5	1,570	NA	338	346	16.2	73.5	52.8	255	0.02	0.11	<0.0028	NA
B-5@32	12/17/2009	32	<4.8	NA	<5.9	<5.9	0.007	0.0087	0.0057	0.031	<0.0029	<0.015	<0.0029	NA
Delta 2010														
MW-11@10	6/22/2010	10	NA	<0.18	NA	3.2	<0.0022	<0.0022	<0.0022	<0.0066	0.011	<0.011	<0.0022	6.1
MW-11@20	6/22/2010	20	NA	<0.25	NA	27.3	<0.0027	<0.0027	<0.0027	<0.0081	<0.0027	<0.013	<0.0027	3.4
MW-12@8	6/22/2010	8	NA	210	NA	45.7	5.2	9.1	6.7	33.3	<0.0028	0.021	<0.0028	8.6
MW-12@10	6/22/2010	10	NA	422	NA	73.6	4	3.5	11.0	31.4	<0.0029	<0.015	0.023	9.5
MW-12@20	6/22/2010	20	NA	<0.24	NA	<2.0	0.019	<0.0028	<0.0028	<0.0085	<0.0028	<0.014	<0.0028	6.6
MW-12A@26	6/23/2010	26	NA	6840	NA	2210	80.9	232	178	607	<0.0027	<0.014	<0.0027	13.1
MW-12A@32	6/23/2010	32	NA	943	NA	267	4.9	15.5	12.0	42.6	0.045	0.044	0.048	6.6
MW-12A@34	6/23/2010	34	NA	<0.22	NA	<1.9	<0.0027	0.0097	0.0074	0.033	<0.0027	<0.013	<0.0027	4.9
MW-13@8	6/22/2010	8	NA	<0.21	NA	<2.0	<0.0026	<0.0026	<0.0026	<0.0077	0.064	<0.013	<0.0026	3.6
MW-13@15	6/22/2010	15	NA	<0.24	NA	<2.0	<0.0029	<0.0029	<0.0029	<0.0087	<0.0029	<0.014	<0.0029	5.9

Notes:
TPHg = total petroleum hydrocarbons as gasoline by EPA Method 8015
TPHg* = total petroleum hydrocarbons as gasoline by CA LUFT
TPHd = total petroleum hydrocarbons as diesel by EPA Method 8015B
TPHd* = total petroleum hydrocarbons as diesel by EPA Method 8015 Silica Gel Treated
BTEX = benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
MTBE = methyl tertiary-butyl ether by EPA Method 8260
TBA = tertiary-butyl alcohol by EPA Method 8260
TAME = tert-amyl methyl ether by EPA Method 8260
mg/kg = milligrams per kilogram
NA = not applicable



TABLE 2
CURRENT GROUNDWATER GAUGING AND ANALYTICAL RESULTS
76 Station No. 5191/5043
449 HEGENBERGER RD
OAKLAND, CALIFORNIA

Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA													
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	GRO (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (SW8260B) (ug/L)	TBA (ug/L)	Ethanol (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)	DRO (ug/L)
MW-3	7/6/2010	8.04	2.66	NP	5.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	8.04	3.12	NP	4.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	7/6/2010	8.87	3.49	NP	5.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	8.87	3.75	NP	5.12	64500	2300	170	2770	6260	19.3	--	<250	--	--	--	--	--	18800
MW-7	7/6/2010	8.83	4.63	NP	4.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	8.83	4.85	NP	3.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	7/6/2010	8.52	3.03	NP	5.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	8.52	3.33	NP	5.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	7/6/2010	8.29	2.02	NP	6.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	8.29	2.03	NP	6.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	7/6/2010	8.62	3.73	NP	4.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/20/2010	8.62	3.85	NP	4.77	<50.0	<0.50	<0.50	<0.50	<1.5	<0.50	--	<250	--	--	--	--	--	<50.0
MW-11	7/6/2010	NSVD	2.44	NP	NSVD	99.2	<0.50	<0.50	<0.50	<1.5	165	174	<250	<0.50	<0.50	<0.50	<1.0	<1.0	226
	9/20/2010	NSVD	2.80	NP	NSVD	76.4	<0.50	<0.50	<0.50	<1.5	82.7	--	<250	--	--	--	--	--	<50.0
MW-12	7/6/2010	NSVD	4.00	NP	NSVD	20300	1030	955	311	2450	1650	1430	<250	<0.50	<0.50	1.0	<1.0	<1.0	990
	9/20/2010	NSVD	4.18	NP	NSVD	73700	6020	6390	2970	18300	894	--	<250	--	--	--	--	--	5220
MW-12A	7/6/2010	NSVD	4.22	NP	NSVD	664	18.3M0	0.78	2.3	50.2M0	14.3M0	11.9M0	<250	<0.50	<0.50	<0.50	<1.0	<1.0	89.3
	9/20/2010	NSVD	4.39	NP	NSVD	<50.0	<0.50	<0.50	<0.50	<1.5	8.5	--	<250	--	--	--	--	--	<50.0
MW-13	7/6/2010	NSVD	4.26	NP	NSVD	122	<0.50	<0.50	<0.50	<1.5	217	199	<250	<0.50	<0.50	<0.50	<1.0	<1.0	469
	9/20/2010	NSVD	4.81	NP	NSVD	250	<0.50	<0.50	<0.50	<1.5	272	--	<250	--	--	--	--	--	<50.0

Gauging Notes:

TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
NSVD - Not surveyed
-- - No information available
NGV - No guidance value

Analytical Notes:

< - Not detected at or above indicated laboratory reporting limit
ug/L - micrograms/liter
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether
DRO- diesel range organics
GRO- gasoline range organics